**SE575 – Final Project Deliverable – Blockchain Demonstration Simulator**

**Project Team Members**

1. Blake Nguyen (Change the order depending on submitter)
2. Trevor Schirra
3. Chaewon Yun

**Demonstration Video Link:** <https://youtu.be/5o1NCRC--94>

**Description**

A blockchain demo, completely deployable to k8s using a containerized (pod) architecture to package the front and backend as a single portable unit. This demo focuses on concurrency at many levels, from source code concurrency in the proof of work for speed, to the stability offered by managing pods through Kubernetes.

1. Standalone modern front-end application built using HTML, CSS, Javascript, and jQuery and showcasing design attributes such as web components and reactive behaviors.
2. Implemented HTML REQUEST to pass Block data, Preference changes, and any other commends from a user to Rust.
3. Used a JSON file to transfer data from rust to the front-end application.
4. Highly parallelized mining approach mimicking the workings of Go to minimize mining time.

*(as you can see this is the “proposal” section from the directions. A brief description and 3-5 bullet points outlining the key/novel attributes used in your project – this doesn’t need to be very long)*

**Project Code Location:** <https://github.com/TPXS-Drexel/bc-rust/tree/main>

**Project Build Information:** See readme section from the Github repo:

<https://github.com/TPXS-Drexel/bc-rust/blob/main/README.md>

**High Level Design Overview**

*(The below is the level of picture that I would expect for your final project. High level, but shows the overall architecture of your solution)*